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10/524,429	02/15/2005	Anton Dambacher	04P02857	6062
24252	7590	09/14/2007		
OSRAM SYLVANIA INC 100 ENDICOTT STREET DANVERS, MA 01923			EXAMINER RALEIGH, DONALD L	
			ART UNIT	PAPER NUMBER
			2809	
			MAIL DATE	DELIVERY MODE
			09/14/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/524,429

Applicant(s)

DAMBACHER ET AL.

Examiner

Donald L. Raleigh

Art Unit

2809

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date See Continuation Sheet.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :02/15/2005,03/24/2006,08/07/2006,09/08/2006.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6,8-13 and 15-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Lenz et al (USPB PUB 2004/0135511).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

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Reference Claim 1:

Lenz teaches:

An electrode system (13) for a high-pressure discharge lamp,[metal halide lamp, abstract line 1. Also, applicant discusses lamp with metal halide fill in preferred embodiment, page 14] at least comprising an electrode,[Fig.1, (15) and abstract line 4] which has a pin-shaped shank (4)[Fig.1 (16) and abstract lines 7-8] with a filament (5) [Fig.1,(17)] fitted in the vicinity of the discharge-side free end [see Fig.1 with filament in discharge vessel (4)] and a connection part (8)[Fig.1 (9) or (12)], connected to the shank (4)[Fig.3 (e.g.) (20) is leadthrough showing shank of electrode being inserted) , and an encircling winding (11)[Fig.3a,(23)] being fitted to the connection part,[Fig.3a (20)] characterized in that filament (5)[Fig.3a,shows filament (unlabeled) on end of shank. Also, Fig. 1 (17)] and winding (11)[23 in Fig.3a] are connected to one another via a spacer (41)[Fig.3a,shank 16 is spacer between winding 23 and filament 23 (Filament and winding shown in Fig.1 as (17))]

Examiner's Note: The applicant repeatedly refers to filament and winding as separate entities and yet joined via an interruption ,(which is also a winding). The prior art, correctly, refers to filaments consisting of winding and not as separate entities.

Examiner considers the filament and winding to be the same entities.

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Reference Claim 2:

Lenz teaches:

characterized in that the diameter DA of the connection part is 50% to 400% of the diameter DS of the shank. [Col.3, para. 0039 ,line 5 states that the shank to core (connection part) size difference is typically 70 to 100% . These values are included in the above range.]

Reference Claim 3:

Lenz teaches:

characterized in that filament (5) and winding (11) are separate parts, which are rigidly connected to one another

[Fig.1 (17), filament and winding are same entity]

Reference Claim 4:

Lenz teaches:

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characterized in that filament (5) and winding (11) form an integral structural unit. [Fig. 1 (17) and Fig.3a (23), filament and winding are same entity).

Reference Claim 5:

Lenz teaches:

characterized in that filament and winding are connected to one another via a winding interruption (24) as the spacer. [exposed shank section (16) in Fig.3a could be considered an interruption in the winding between the 2 parts of the filament]

Reference Claim 6:

Lenz teaches:

characterized in that the connection part is a separate part. [Fig.3a,(20) shows as a separate piece]

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Reference Claim 8:

Lenz teaches:

characterized in that at least the shank consists of high-melting, electrically conductive material, preferably of tungsten or tantalum alone or predominantly of tungsten or tantalum.

[Page 1, para. 0009, line 2, shank made from tungsten]

Reference Claim 9:

Lenz teaches;

characterized in that the connection part consists of molybdenum, niobium, electrically conductive cermet alone or predominantly of one or an alloy of these materials.

[Page 3, para. 0040, claim 4, line 2, pin made from molybdenum]



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Reference Claim 10:

Lenz teaches:

characterized in that filament (5) and winding (11) consist of the same material. [In Lenz, as mentioned before, the filament and winding are the same entity]

Reference Claim 11:

Lenz teaches:

characterized in that filament and winding consist of molybdenum and/or tungsten. [Page 3, para. 0034, line 14]

Reference Claim 12:

Lenz teaches:

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characterized in that filament and winding have the same pitch. [Since filament and winding are same entity, they would have the same pitch]

Reference Claim 13:

Lenz teaches:

characterized in that the electrode system comprises a front piece, in which filament and winding are symmetrical with respect to one another. [Since filament and winding are same entity, they are symmetrical to each other]

Reference Claim 15:

Lenz teaches:

characterized in that the connection part forms a first part of a leadthrough. [Fig.1 (9) shows leadthrough connected to shank]

Reference Claim 16:

Lenz teaches:

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characterized in that the leadthrough also comprises a second, end part, which in particular is a niobium pin. [Page 3, para. 0035, line 2 shows leadthrough as a niobium pin]

Reference Claim 17:

Lenz teaches:

characterized in that the connection part has substantially the same diameter as the shank, and in particular in that their diameters differ by less than 30%. [Page 3, para. 0036 describes the typical diameter of the shank in relation to the pin (connection part) is 30 to 65% and a crimping process can be used in such case. However, in para. 0039, Lenz teaches that when the core pin of Mo(lybdenum) and the shank is of tungsten, it has to be welded because the size difference is too small (i.e. less than 30%)]

Reference Claim 18:

Lenz teaches:

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characterized in that the diameter of the spacer is locally reduced.

[Fig. 3a show the size of the spacer (16) is reduced from the size of the filament (23)]

Reference Claim 19:

Lenz teaches:

characterized in that the height of the winding (11) is

reduced at the end remote from the discharge. [The height of the winding goes to zero

at the end remote from the discharge (Fig. 3a, where it enters tube)]

Reference Claim 20:

Lenz teaches:

the lamp having a discharge vessel (2) with two ends [Fig.1, (4). ] ,

the electrode system being inserted into one or both of these ends of the discharge vessel [see Fig. 1 and 2 electrodes (15)], the discharge vessel (2) being produced in particular from ceramic. [Page 2, para. 0030, line 7 made from ceramic]

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lenz (USPG Pub 20040135511) in view of Huettinger et al (US Patent No. 6,075,314).

Reference Claim 7:

Lenz fails to teach:

that the connection part is an integral extension of the shank.

Huettinger teaches a piece of tungsten wire that performs the function of a lead through (connection part) and the shank of the electrode (Col. 4, lines 33-37).

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It would have been obvious to one of ordinary skill in the art to apply the teachings of Huettinger to Lenz and make the lead through and electrode shank one piece as this would eliminate the need for a weld joint that may fail.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lenz (USPGPub 2004/0135511) in view of Matthews et al (US Patent No. 5,357,167)

Reference Claim 14:

Lenz fails to teach:

characterized in that at least one further winding or coiled formation is fitted onto the winding (11) or a part thereof

Matthews teaches; a second winding over the first in a high pressure discharge lamp.

[Col. 6, lines 65-67 and Fig. 6B. Also, abstract line 1 states it is a high pressure discharge lamp.]

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It would have been obvious to one of ordinary skill in the art to apply the teachings of Matthews to Lenz and provide additional layer(s) of winding to the first winding layer in order to increase the surface area and promote better thermal radiation.

### ***Conclusion***

Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

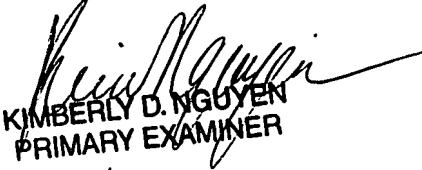
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L. Raleigh whose telephone number is 571-270-3407. The examiner can normally be reached on Monday-Friday 7:30AM to 5:00PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Nguyen can be reached on 571-272-2402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DLR

  
KIMBERLY D. NGUYEN  
PRIMARY EXAMINER  
9/12/07